

An Essay

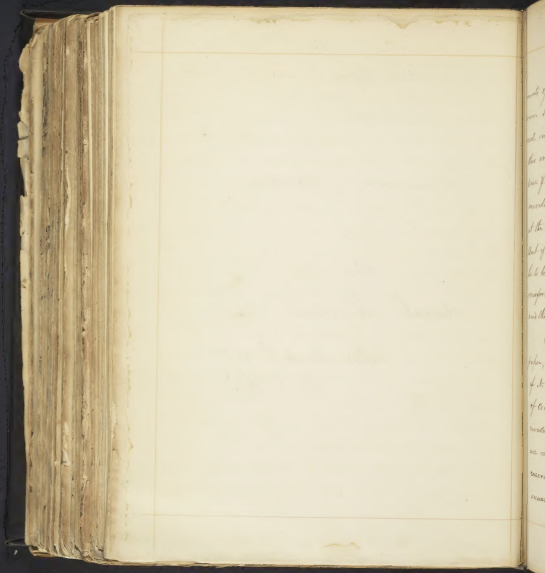
on

Pneumonia Biliosa

By

Josiah R. Hunt

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W. L. H.



In writing upon this subject, embarras-
ments of almost every description, present themselves to my
view. Fully conscious that I am writing for the criti-
cal inspection of the greatest Physicians of which
this or perhaps any country can boast; and at the same
time feelingly alive to the imperfections which must
inevitably attend my performance, my mind recoils
at the subject, and my pen falters in my hand.
But if truth may be extended to any, it surely will
be to him, who has had to grapple with poverty and
misfortune, circumstances every way hostile to science
and the improvement of medicine.

The disease which forms the subject of this
paper, made its appearance in one of the lower districts
of N. Carolina, in the winter of 1825-26. This section
of Country is exceedingly level, intersected by many
rivulets swamps and creeks. Contiguous to these streams
are many marshes, meadows and ponds. These are
reservoirs of water in winter and spring, but in
summer and autumn they become dry. Persons

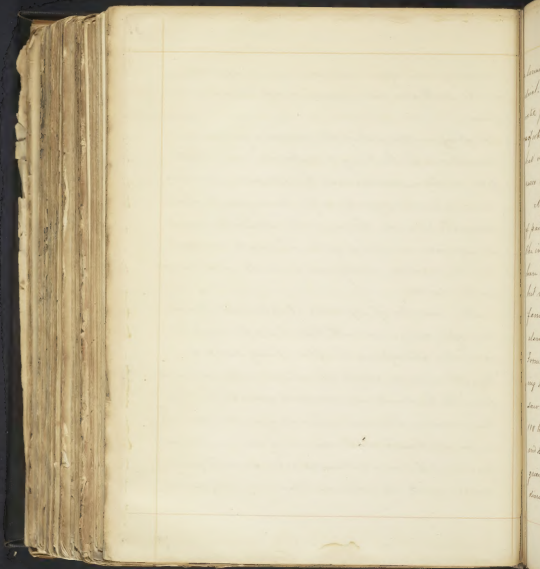
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residing near those marshes and ponds, especially on the north-east side, seldom escape the autumnal fever.

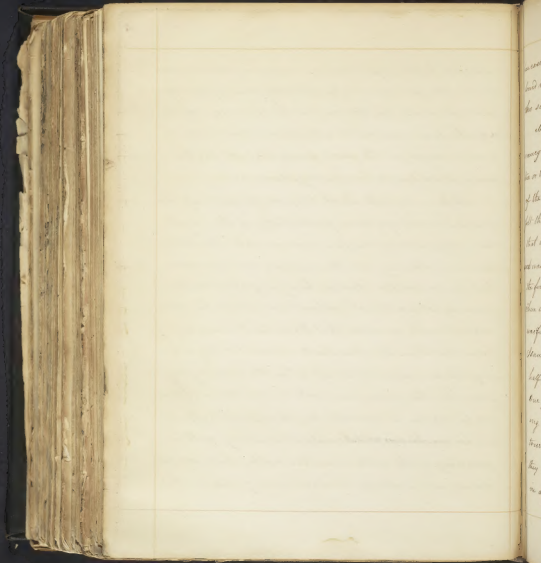
The spring and forepart of the summer of 1795 were remarkable for the heavy & continued rains which fell in those seasons: and the latter part of summer and autumn, were equally so, for the excessive heat and drought. During this period the Bilious Fever made its appearance. Many of the inhabitants were sick, but no peculiar malignant character was observed in the disease.

The months of September, October, and November passed away, and with them it was fondly hoped our sickly atmosphere had fled. Sately, and as he thought, securely escaped the ravages of the autumnal fever, the husbandman returned to glean the fruit of his summer toil, and prepare to enjoy, during the reign of winter's night, the ease of domestic tranquillity. But it was a fallacious hope. Scarcely had winter made its entrance when our citizens were



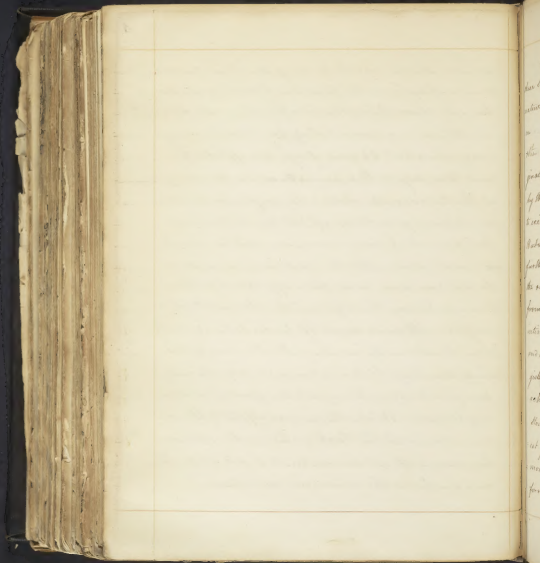
alarmed by the appearance of a new and terrible complaint. It was supposed to be Phrenitis in a highly aggraved form. As this disease was the precursor of the one of which I am to treat, and which, I have no doubt, had its origin in the same source, I shall give two cases which came under my observation.

Miss — a girl about 16 years of age complained of pain in the eyes more particularly of the right. The integuments of the face were swollen. She had been complaining all the morning and afternoon, but no particular danger being apprehended, the family retired to rest. About two o'clock they were alarmed with an idea that the patient was dying. From that time the attendants represented her as having had convulsive fits. At 5^o in the morning I saw her. Her pulse was weak, irregular and from 110 to 120 in a minute. Her cheeks were suffused and her countenance with constant moaning, with a grinding of the teeth, was observable. Subultus tendimus and picking the bed covering also marked



her case. She had lost the power of speech and had swallowed nothing from the time she became worse. In this situation she continued a few hours and died.

all^{re} — a married lady, far advanced in pregnancy, and about 20 years of age, was afflicted for two or three days with a pain in the ear. On the evening of the third day, she stated to her companion, that she felt the pain go suddenly up into her head. From that time she became worse, soon lost her speech, and was delirious. All the symptoms enumerated in the first case soon made their appearance in this. There was however this difference. In this case the pulse was full with some degree of preternatural strength. I saw her at 8 in the morning. She had already lost half a pound of blood and I immediately took away one pound more. It only had the effect of weakening the pulse. Blister Plasters were applied to the carotids, and to the back of the neck. Although they drew well, yet she continued to get worse, and in a few hours she miscarried and died.



It is apparent that the disease in the liver in these two cases (and a number of others of the same nature occurring) originates from the disease of the eye, in the one case, and the disease of the ear, in the other. By what process it removes from the parts originally affected to the liver, is difficult to tell, notwithstanding that sympathy or consent of parts, which is known to exist as one of the laws of the animal economy. Habit is my opinion, and which I shall endeavor further to illustrate, that the disease of the eyes, in the one case, and of the ears, in the other, originates from irritation of the stomach. That there is an intimate sympathetic union between these organs and the stomach, is well known to modern pathologists. Almost every person has experienced the heat, redness, and burning, from heat & accumulation in the stomach, which did not become, just as the stage was further advanced, as well as manifested in the common people of Carolina with her back, that they ever formerly resort to counteracts, for a remedy. The order



...the value of the arguments by which this doctrine is supported, would be an idle waste of time. That the diseases of the head and of the organs of seeing and hearing very often have their origin in the Stomach, we shall appear as a fact, not endeavour to prove, that this was the case, in the disease in question by the following cases and observations.

A lad, about ten years of age, and the brother of the first described patient, living in the same house, was taken with a severe pain of the eyes. Swelling of the face soon came on attended with febrile action in the pulse. The symptoms being precisely the same as those with which his sister was taken, and when remission, still taught the family the sad effect of delaying too long to apply for medical aid (a circumstance not uncommon in the country) it of course excited considerable anxiety. A surgeon in six hours after he was taken ill. He immediately took ten grains of calomel with twenty of Saltpetre - which, operation, happily, afforded complete re-



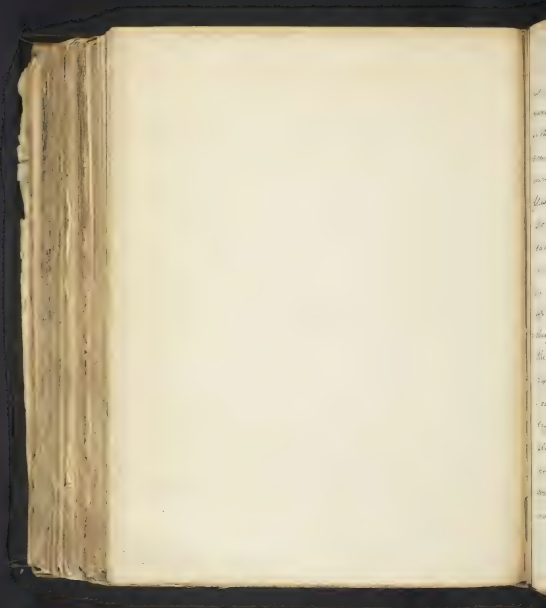
life.

A young man of the family of the married lady, was seized with a violent pain in the head, accompanied with rigours and alternate feelings of heat & cold, while attending the funeral ceremonies. He was ordered a strong cathartic soon recovered. It cannot fail to strike the attention of the observer, that in all probability, if the two first named patients could have received the benefit of evacuations, before the head became affected, they might have survived. I have seen many cases of Phrenitis, and after the disease variously terminated, it invariably proved fatal. No doubt it often requires venesection as the principal remedy. But I have no doubt, that in its forming state, it is often cured with, if not dependant on gastric disorder; and I should not hesitate, in cases like the above, to prescribe the most powerful evacuates. I am not certain in the pathology of the disease, this would certainly be the most appropriate remedy.



even after the occurrence of the above cases,
our disease fully developed itself. Persons of every
description, were the subjects of its wide devor-
ing influence. It paid no regard to sex, age, calling, or
condition of life. It was, however, found upon com-
parison, that those persons who had been afflicted
with the bilious fever, during the fall, were more
liable to it than others. And it was further observ-
ed, that it was most frequent, and most fatal, in that
section of country now which ran a large swamp
embracing much marshy land.

The disease was generally ushered on by a chill.
In some the chill would be preceded by indigres-
sion for a day or two, the patient complaining of wandering
pains, weariness or lassitude on the slightest exertions,
a loss of appetite, and occasional nausea. At other
times however, the first intimation which the patient
would have of approaching disease, would be, a
sensation of unnatural cold accompanied with
pain of the head, back, side, and very often, in the



pit of the stomach. The chill usually was of short
 duration & it succeeded a sensation of heat both
 at the skin & stomach; and the patient now began a
 complaint of shortness of breath accompanied with
 more or less pain on inspiration. The cheeks were
 flushed, the eyes watery, and the patient appeared
 spoke, as if he had taken a bad cold. The throat be-
 came exceedingly sore, and deglutition was performed
 with difficulty. One thing was particularly remarked
 in many cases, that when the patient was raised
 up out of bed, he would pant for breath as one bea-
 ring in the last agonies. This however was not always
 the case & troublesome cough never failed to nar-
 row the patient. The sensations of heat and cold,
 would succeed each other, several times during the
 day and night. The tongue was usually white, a little
 streaked with yellow in the centre. It was however,
 now and then, covered with a yellow soot, from the
 commencement. The pulse was variable. Sometimes it
 would be soft, small, irregular and exceedingly fast.



At other times it would be soft, round, and full. It seldom had any proder natural strength in it. Copious perspiration would generally succeed the cessation of heat & cold, but they secondary to aggravate the disease. These symptoms continuing, the patient rapidly declined; and usually died, in great agony, in a very few days.

copious and free expectoration of phlegm, a copious discharge of urine, depositing a peculiar saccharine oscur, depositing a calcareous sediment; and a general abatement of the symptoms, were prognostic of a recovery. On the contrary, scanty & high coloured urine, copious perspiration, and increased difficult breathing, marked its fatal termination.

The cough, soreness of the fauces and difficult deglutition, pain of the side or stomach, with a quick, soft and frequent pulse, were the distinguishing symptoms of this disease.

It differed from our common Nephritis Vesicae, in the following particulars. In Pneumonia Vesicae there were,



invariably, affections of the chest & lungs. The patient either complained of pain at the end of the sternum, or about the middle of the fifth or sixth ribs; and this pain was much increased by inspiration. The patient complained of heat and cold several times in the day, and could not bear exposure to cool air. These are symptoms, which separately, seldom appear, and conjointly, never are seen in our autumnal Bilious Fever. It was distinguishable from Pleurisy, in the absence of the acute, constant, and pungent pain of the side; and in the want of that full, tense and corded pulse, which so invariably attends that complaint. Added to this, in Pneumonia Biliosa, there was much complaint of the head & back. I have called it Bilious Pleurosy, because, in many of its symptoms, it partook of the nature of both complaints. But I am by no means torridous of the name, and am ready to give it up, provided a better can be substituted.

I shall now proceed to enumerate the different



remedies used in this complaint, and to point out the effect of each.

1 Blood Letting.

In the commencement of this complaint, venesection was resorted to, under the conviction, that it was owing to inflammation in the organs affected, produced by cold. I must confess, that this pathology adopted by myself and others, was the source of error. The Patients that I bled to any extent died. Nor was the remedy more unfortunate in my hands, than in the hands of others. Many were the unfortunate victims of this miserable pathology. Both in the hands of Physicians and private individuals, venesection, carried it in every case, to fatal. In another case, not more of a case, where the Patient lost more than a pint of blood, but that death, was the final result. In the thinly settled parts of our country, many weak individuals become bleeders, and it is usual with them, to bleed freely, in all our various complaints resembling the present. Hence, venesection was resorted to in those districts, and still in the saddest cases were discovered by me - and hence, it was equally fatal. It is true, that the top



of blood was felt to be a great mitigation of the suffering of the patient. But it is equally true, that the most alarming symptoms, soon taught the numerous subjects, that no race was cured. But this will be more apparent in the following cases and observations.

At a young man, of a lethargic habit, sometimes up and down in the morning with a course of the bowels. He was taken with a chill, which was succeeded by alternating feelings of heat and cold. I saw him in the afternoon, so that time he complained of great pain in the head, back, and side, with great difficulty in respiration. The face was flushed, the tongue milky, tinged with yellow in the centre, a considerable secretion of the eyes, and the pulse was soft, quick, and slightly irregular. Eight ounces of blood were taken from the arm, and for a few minutes, he was apparently relieved. But in a very short time, alarming symptoms of syncope came on, accompanied by irregular respiration. He then took half an ounce of Dr. Ferri's, and I left him. He might have been again. His pulse then became exceedingly small and fast, and there was great, mor-



reason clear. The medicine had produced a free
 perspiration and acted as a cathartic. A blister, over the

the throat, was drawn, and some
 issues were applied to the extremities. A large quantity of
 paragon was given him: he continued however to get worse,
 and died next morning. The other case, which termi-
 nated fatally, only differed from this above, in the strength
 of the pulse, and the duration of the complaint. He was
 a young man of a meagre habit. His pulse was full
 with some preternatural strength. He was bled, but
 got no better. Another Physician was called in who repeat-
 ed the bleeding. He continued to get worse, and in a bout-
 ten days he died.

The third patient which I saw was M^{rs}. a lady
 of a full phlegmatic habit. Complained of great soreness of
 the throat, difficult deglutition, even in the head, back, and
 side. The face was flushed, she was suffused with tears, and
 the conjunctiva a little injected. She was restless and inclined
 to be delirious. The pulse was full, quick, and about 96
 to the minute. The tongue as usual, was a little white



streaked with yellow. I opened a vein and kept my finger on the pulse. Perceiving that the pulse became weaker, the vein was immediately stopped; and although only two ounces were taken away, yet the patient was evidently worse. It was now determined to alter my plan of treatment, and resort to

Purgings.

A brisk cathartic was immediately given, and after its operation, I had the pleasure to find my patient better. At bed time a grain of opium was prescribed. In the morning, reported to have passed a good night. On evacuation coming on about 12 o'clock, another cathartic was given, which brought away copious, dark, large stools; and at night the opiate was repeated. In the morning she reported to have passed a good night, the cathartic however was repeated, which, continuing to bring away dark foetid stools, the cathartic, with short intermissions, was repeated ^{two} times, by the frequent exhibition

R Calomel gr XV

℞ Acap. gr XX m

℞ Suck: 3 1/2

Calomel: Mgr 3 1/2

℞ Oleum Ricini 3 i

R ℞: Cal: gr . X expectoratory and

remains till it operates

It usually operates once in 8 hours and they operate



17
of laxatives; every now and then giving calomel, com-
pound. Blister were now applied over the affected parts and
to the extremities; and calomel, joined with opium, was
given for a few days, when the pains becoming sore, the disease
gave way, and the patient soon recovered her health.

I now resolved to, purgatives in every case that came
under my observation; and, have the satisfaction to state, that
I never once regretted this prescription. One thing was
observable in a majority of cases, that the first cathartics would
only produce stools of the common appearance, whilst the
second, seldom failed, to produce the dark foetid stools as
above. That they were not useful, I cannot permit myself
to believe, having prescribed them in upwards of fifty cases,
of this disease, and with the exception of 2 or 3. For, at the
time disease raged all January, February, and March, yet
lost but one patient during that period; and in him it ter-
minated in Phthisis Pulmonalis. I mention this circum-
stance to show, that the prejudice, existing against the
use of purgatives in the affections of the chest, are cur-

* R calomel gr
opium gr v

R Pilae x. an every 6 hours



founder, at least so far as our disease is concerned.

But that true a proper time to stop, as well as to commence the operation, is a point, which cannot be too strongly insisted on. The mercurial purgation carried beyond the point that is necessary to remove the morbid matter from the stomach and bowels, becomes themselves the cause of irritation, and thus increase the disease, they are intended to relieve. I had often observed in our authors that we have no doubt but that many valuable lives are lost, by a too free indulgence in the use of purgative medicines. The rules which experience has taught me to observe in Bilious tumors I carefully remembered in this when our the stools became watery, mixed with a dark brown discolored substance not unaptly compared to the scrapings of animal bowels, purging was laid aside at least for the present, and nutritious diet with mucilaginous drinks were substituted the former an emblem of the propriety of continuing to purge, the practitioner will take into the account the state of the system, the abundance or want of tongue, the effect of the former, &c.





greatly increased. But in the exhibition of the article the utmost attention must be paid to the quantity. By giving too much, we unnecessarily relax the system, disorder the digestive organs, and bring on very unpleasant results. On the contrary, by not giving enough to soothe the pain, tranquillise the mind, and calm the system, we do harm, by increasing, instead of diminishing, the action of the system. It must however be acknowledged, that no precise and definite rules can be laid down by which we can always decide with certainty, on the quantity of opium necessary to answer the indication; since, it requires much more in some constitutions than in others. I had, or thought I had, discovered, that it required more in general in the male than in the female sex. This I judged was owing to the greater degree of action to be overcome in the one sex than in the other. Proceeding upon this suggestion, it was my custom to give large doses to the plethoric, with a full, rosy, & the soft, pulse, & have what I said to be merely the pain subsided, & the consciousness, attended with a small, frequent, and irregular



false; other circumstances being the same. Whether the theory be true or false, I am persuaded, the practice is both sound and correct. It was customary to join camellia with the opium, from half to a grain of the latter to one of the former, and this dose was repeated every in two hours till it had its desired effect. From several experiments, I was fully convinced, that the present good effect of the medicine, was entirely owing to the opium. If the first violent symptoms were subdued the conjoined articles were still continued, till repeated at once, in doses as in the third case related above. The pains however usually returned (tho' in general much mitigated) with the exacerbation of the disease, after which we resorted to

Blisters.

Blister as might be expected in such cases afforded great relief. They were made as nearly as could be over the parts affected; that where constitutional impulsion was desirable, they were also applied to the extremities. The whole course of cure was assisted in

Expectorants and Tonics.



The Seneca was given in this complaint, and I think with the most decided advantage. Between the genus of giving the cathartic medicine, and, when symptoms of debility require it, constantly, the patient was directed to take a ^{large} spoonful of the medicine prepared as below: once in three or four hours. This medicine agreed well with the stomach, and produced a gentle excitement with a moderate perspiration. It has been mentioned, that profuse perspiration was among the alarming symptoms of this disease - and yet Seneca, a powerful sudorific, was prescribed. I can say however, that so far from increasing the fever the use of it seemed to diminish it. Did not the perspiration proceed from a relaxed condition of the capillaries? and did not the Seneca tend to stimulate it by stimulating the arterial system to increased action? At least this was my view of it.

Since writing the above a friend has placed in my hands the 35th no. of the medical recorder, containing Dr Cartwright's Essay on Pneumonia Pleuritis &c.

^{Dr} Seneca Seneca $\frac{1}{2}$ i
 Pul. Colica $\frac{1}{2}$ i, add a



carefully read, as far as published, what he has written on this subject, we have been forced to the conclusion, that the Pneumonia Beloua, of Louisiana & Mississippi, is not the Belous Pleurisy of Carolina - at least as it prevailed last winter. To point out the difference would be a useless waste of time.

I have now written what I had to say of our late winter epidemic. I neither claim nor arrogate to myself any new discovery. The mother of cure was plainly indicated by Professor Chapman, in his excellent book on Abdominal Medicine and Therapeutics. If so, my name added any thing to that which was already known I shall incur the just and at most of my expectations.

Philadelphia October - 1826



